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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,441	11/06/2003	Koji Kondo	01-304-DIV	7616

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EXAMINER	
TRINH, MINH N	

ART UNIT	PAPER NUMBER
3729	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/701,441	KONDO ET AL.	
	Examiner	Art Unit	
	Minh Trinh	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *1-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/166,731.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/6/03, 6/24/04, 9/30/04, 2/10/05, 5/24/05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II invention(claims 14-22) in the reply filed on 11/3/05 is acknowledged. The traversal is on the ground(s) the examiner has not established a prima facie case of serious burden of examination of the inventions of Groups I and II together. This is not found persuasive because the inventions of Group I and II each have a separate status in the art and clearly have a separate field of search, and the search required for Group I is not required for Group II (as indicated in prior action paragraphs 1-2). Moreover, these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. In accordance with MPEP §803, the examiner has demonstrated that the inventions of Groups I and II are each independent or distinct as claimed and a serious burden would be placed on the examiner as discussed above. The requirement is still deemed proper and is therefore made **FINAL**. Thus, Claims 1-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention I, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/3/05.

Specification

2. The abstract should be revised to reflect the method invention instead of the product.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14-19 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kurita et al (6,404,052)

Kurita et al discloses a method for manufacturing a printed wiring board, the method comprising steps of:

forming a recess or an opening 26 in a sheet member I1-I3 , stacking a plurality of resin films (see Fig. 4C); placing the sheet member on an outer surface of a stacked body of the resin films 6a, wherein the stacked body formed at the step of stacking; inserting an electric device 41in the recess or the opening (see Fig. 4B0; and bonding the resin films and the sheet member by pressing and heating the resin films and the sheet member after the step of inserting (see final process shown in Fig. 4D, and the discussion at col. 9, lines 60-67).). It is noted that col. 7 discloses the use of resin film as substrate layer. Thus claims 14-19 are anticipated by the above reference.

Limitation of claims 15-19 are also met by Kurita et al (see Figs. 4A-4D) and the above discussion.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurita et al (6,404,052).

Kurita et al does not disclose where the resin and the sheet member having the elastic modulus of 1-1000MPa in the bonding step. However, this appears to be the material properties of the resin and the sheet member, since the Kurita et al disclose the same material therefore the material must also have same properties as that as recited in claim 20. Furthermore, it would have been an obvious matter of design choice to choose any desired materials including their structural properties since applicant has not disclosed that these features as recited in claim 20 are critical, patentably distinguishing features and it appears that the invention would perform

equally well with the materials properties and its configuration as taught by prior art reference.

7. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurita et al (6,404,052) in view of JP11233904A.

Kurita et al as applied above do not teach the heat release layer associated during the bonding step (see claims 21-22). The JP11233904A discloses that (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the JP11233904A teaching about heat release layer onto the Kurita et al invention of in order to form a desired structure for releasing heat emitter by the electronic component mounted therein (see Figs. 1-7, reference 11).

Limitation of claim 22 is also satisfied as the above discussion.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/10/05
mt

MINH TRINH
PRIMARY EXAMINER